REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks and the attached Rule 132 Declaration.

It is an object of the present invention to provide an electroconductive endless-belt having good strength, particularly excellent folding endurance and creep durability, and good dimensional stability. It is another object to provide an image formation apparatus equipped with the belt.

Accordingly, the present invention provides an electroconductive endless-belt which comprises:

as a base material, at lease one member selected from the group consisting of acrylonitrile-styrene resin containing 3 to 50 mass % of a flexible component glass transition temperature lower than 25℃, a polymer alloy of a having thermoplastic resin with acrylonitrile-styrene resin containing 3 to 50 mass % of a flexible component having glass transition temperature lower than 25℃, and a polymer blend of a thermoplastic resin with acrylonitrile-styrene resin containing 3 to 50 mass % of a flexible component having glass transition temperature lower than 25℃.

In contrast, Masuda et al (US 6,175,712) and Niimi (US 6,132,911) fail to disclose or suggest an endless belt as claimed having an acrylonitrile-styrene resin, a polymer alloy of a having thermoplastic resin with acrylonitrile-styrene resin or a polymer blend of a thermoplastic resin with acrylonitrile-styrene resin, each having the claimed amount of flexible component and glass transition temperature.

As acknowledged by the Examiner Masuda et al fail to disclose acrylonitrile-styrene resin, the amount of flexible component and the glass transition temperature. In addition, the belt of the present invention, for example, as shown in Example 1, comprises one layer in which acrylonitrile butadiene styrene resin contains, as a base material, 10 mass % of a

flexible component having glass transition temperature Tg of -81.4°C. The measurement of the glass transition temperature is provided in the Rule 132 Declaration attached herewith. Masuda et al do not disclose or suggest 3 to 50 mass % of a flexible component having glass transition temperature lower than 25℃.

In addition, the structure of Masuda et al has two layers. **New Claim 20** claims a belt with one layer.

Niimi discloses at col. 2, lines 48 to 60, a method for preparing an effectively dispersable organic pigment when a coating dispersion including the organic pigment is prepared. However, there is no disclosure or suggestion of 3 to 50 mass % of a flexible component having glass transition temperature lower than 25℃.

Further, Niimi discloses at col. 6, line 46 through col. 7, line 19:

> Suitable materials for use as the electroconductive substrate include materials having a volume resistance not greater than 10^{10} Ωcm. Specific examples of such materials include plastic cylinders, plastic films or paper sheets, on the surface of which a metal such as aluminum, nickel, chromium, nichrome, copper, gold, silver, platinum and the like, or a metal oxide such as tin oxides, indium oxides and the like, is deposited or sputtered. In addition, a tube can also be used as the substrate 31 which is prepared by tubing a plate of a metal such as aluminum, aluminum alloys, nickel, stainless steel and the like or tubing by a method such as impact ironing or direct ironing, and then treating the surface of the tube by cutting, super finishing, polishing and the like. Further, endless belts of a metal such as nickel, stainless steel and the like, which have been disclosed, for example, in Japanese Laid-Open Patent Publication No. 52-36016, can also be used as the substrate 31.
>
> Furthermore, substrates, in which a coating liquid including a binder resin and an electroconductive powder is coated on the supporters mentioned above, can be used as the substrate 31. Specific examples of the electroconductive powder include carbon black, acetylene black, powders of metals such as aluminum, nickel, iron, nichrome, copper, zinc, silver and the like, and metal oxides such as electroconductive tin oxides, ITO and the like. Specific examples of the binder resin include known thermoplastic resins, thermosetting resins and photo-crosslinking resins, such as polystyrene, styrene-acrylonitrile copolymers, styrene-butadiene copolymers, styrene-maleic anhydride copolymers, polyesters, polyvinyl chloride, vinyl chloride-vinyl acetate copolymers, polyvinyl acetate, polyvinylidene chloride, polyarylates, phenoxy resins, polycarbonates, cellulose acetate resins, ethyl cellulose resins, polyvinyl butyral resins, polyvinyl formal resins, polyvinyl toluene, poly-N-vinyl carbazole, acrylic resins, silicone resins, epoxy resins,

> melamine resins, urethane resins, phenolic resins, alkyd resins and the like. The electroconductive layer can be formed by coating a coating liquid in which an electroconductive powder and a binder resin are dispersed or dissolved in a proper solvent such as tetrahydrofuran, dichloromethane, methyl ethyl ketone, toluene and the like, and then drying the coated liquid.

However, the endless-belt of the present invention uses as a base material, acrylonitrile-styrene resin containing 3 to 50 mass % of a flexible component having Tg lower than 25°C. Thus, the endless belt is different from the two layers obtained by dispersing an electroconductive powder with an appropriate binder resin and coating the dispersion onto a support as disclosed in Niimi.

In addition, Claim 20 of the present invention relates to one layer while Niimi has two layers.

Thus, even a combination of Masuda et al and Niimi does not result in the present invention.

Therefore, the rejection of Claims 1-15 under 35 U.S.C. § 103(a) as unpatentable over Masuda et al (US 6,175,712) in view of Niimi (US 6,132,911) is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The objection to Claims 6, 9 and 13 have been obviated by the amendment of these claims.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Kirsten A. Grueneberg, Ph.D.
Registration No.: 47,297

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
NFO:KAG: